34817 and 34818.

From South Africa. Presented by Prof. J. Burtt Davy, government agrostologist and botanist, Union of South Africa, Department of Agriculture, Pretoria. Received January 15, 1913.

34817. Chaetochloa Lindenbergiana (Nees) Hitchc. (Panicum lindenbergianum Nees, Flor. Afr. Austral., p. 47, 1841.)

 (Setaria lindenbergiana (Nees) Stapf, Flora Capensis, vol. 7, p. 422, 1899.)

Seeds of this South African grass were received under the name Setaria lindenbergiana Stapf. The generic name Chaetochloa is now used for this genus. Chaetochloa lindenbergiana seems never to have been published, and it is necessary to adopt it here. (A. S. Hitchcock.)

Distribution.—A perennial grass found in tropical East Africa and southward to the Cape.

34818. Eragrostis superba Peyritsch.

"This is one of our best native pasture grasses on the high veld and extends also to the bush veld, its range being from about 3,500 feet (or lower) to 5,500 feet or more. It is common in sandy soils in British Bechuanaland, where the rainfall is perhaps not more than 10 inches, coming in summer." (Davy.)

 $Distribution. — \Lambda$ perennial grass found in Portuguese West Africa and southward to the Cape.

34819. Elichrysum orientale (L.) Gaertn. Immortelle.

From Toulon, France. Presented by Mr. M. F. Mansfield, consular agent, through the American consul general at Marseille. Received November 25, 1913.

"The choice of soil is very important. Rocky or sandy soils with southern exposure are best adapted for this purpose. In rich, deep, cold soils the immortelle is killed by the first frosts.

"After the soil has been broken and well prepared, the ground is laid out in rows 40 to 50 centimeters apart (15.74 to 19.68 inches); in these rows the young plants are set out at a distance of 30 to 35 centimeters (11.81 to 13.77 inches) from each other. Care should be taken to heap up the soil about the roots. These early plants should be watered by means of a sprinkler. If it should rain after the planting, sprinkling would be unnecessary. It would be advisable during the first four or five days to protect these young plants from the hot rays of the sun. When they have begun to grow, they should be exposed to the full rays of the sun, and during the winter protected from the cold, for the immortelle is very sensitive to frost. It is for this reason that the immortelle is cultivated at Ollioules and Bandol only in soils well exposed to the sun and upon the southern slopes.

"Cultivation of the immortelle is exceedingly simple. It consists in spading lightly the ground about the plant and applying a suitable fertilizer. The ground should be spaded whenever weeds spring up around the plants. As for the fertilizer, it consists of oil cakes and stable manure, which is placed about the roots of the young plants when they have attained a certain development. The fertilizer should be renewed in this region every year, in October or November.

"The immortelle commences to yield after the second year and continues to bloom even more than 20 years. In this region the flower is gathered in June or July. At the moment the flowers commence to open and show a small red point in the center and are of a beautiful golden yellow, they should be gathered. When the flowers have arrived at this degree of maturity, they should be immediately gathered, for they open very rapidly and lose their commercial value. After the flowers have been